

REMARKS

Initially, Applicants express appreciation to the Examiner for the detailed Official Action provided. Furthermore, Applicants express appreciation to the Examiner for acknowledgment that the drawings are acceptable in the Official Action and for the acknowledgment of Applicants' Claim for Priority and Receipt of the certified copy of the priority documents in the Official Action.

Additionally, in response to the Interview Summary dated October 20, 2008, and in which a telephone interview between the Applicants' representative Steven Wegman and Examiner Henning on October 2, 2008 was summarized, Applicants note that the summary provided by the Examiner is accurate. Applicants would like to take this opportunity to thank the Examiner for his courtesy in conducting the above-noted interview, as well as his constructive, cooperative, and helpful attitude exhibited during the above interview.

Upon entry of the present paper, claims 1, 5, 7, 11, 13, 15-16, 23, 27, 29, 31, and 33 (i.e., all independent claims pending in the present application) will have been amended. The herein-contained amendments should not be considered an indication of Applicants' acquiescence as to the propriety of the outstanding rejection. Rather, Applicants have amended claims 1, 5, 7, 11, 13, 15-16, 23, 27, 29, 31, and 33 in order to advance prosecution and obtain early allowance of the claims in the present application. Furthermore, no prohibited new matter has been introduced by the abovementioned amendments. Thus, claims 1-39 are pending in the present application for consideration by the Examiner.

Applicants address the rejections provided within the Official Action below and respectfully request reconsideration and withdrawal of the outstanding rejections pending in the present application together with an indication of the allowability of claims 1-39 (i.e., all pending claims) in the next Official communication. Such action is respectfully requested and is now believed to be appropriate for at least the reasons provided below.

35 U.S.C. §§ 102, 103 Rejections

In the outstanding Official Action, claims 7, 9, 11, and 29-36 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Pat. No. 6,490,353 to Tan (hereinafter "TAN").

Additionally, on page 8 of the outstanding Official Action, the Examiner rejected claims 1, 3, 5, 13-15, 18, 20, 22, 25, 28, and 37-38 under 35 U.S.C. § 103(a) as being unpatentable over TAN. However, in this regard, the Examiner also discussed, on pages 13-17 of the outstanding Official Action, that claims 16, 23, and 27 are rejected under 35 U.S.C. § 103 as being unpatentable over TAN. Thus, Applicants believe the Examiner intended to indicate, on page 8 of the Official Action, that claims 1, 3, 5, 13-16, 18, 20, 22-23, 25, 27-28, and 37-38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over TAN. The Examiner is respectfully requested to confirm Applicants' understanding in the next official communication.

Initially, Applicants note that, without agreeing to the propriety of the Examiner's rejection and solely to expedite the patent application process, Applicants have amended claims 1, 5, 7, 11, 13, 15-16, 23, 27, 29, 31, and 33 (i.e., all independent claims pending in the present application). In this regard, Applicants respectfully submit that no new matter has been introduced by the abovementioned amendments. Specifically, support

for the amendments to claims 1, 5, 7, 11, 13, 15-16, 23, 27, 29, 31, and 33 can be found at least in paragraphs [0111]-[0123] of the published application (page 8, lines 8-24 of the filed specification). More specifically, paragraphs [0111]-[0123] of the published application disclose a preferred embodiment of the present application wherein at least one of the encryption module indicators indicates an asymmetric encryption algorithm and at least one of the encryption algorithm module indicators indicates a symmetric encryption algorithm. In this regard, an asymmetric encryption algorithm is generally understood by one having ordinary skill in the art to refer to an encryption algorithm wherein the encryption key and the decryption key are different (e.g., at least the RSA encryption algorithm). Furthermore, a symmetric encryption algorithm is generally understood by one having ordinary skill in the art to refer to an encryption algorithm wherein a single key is used for encryption and decryption (e.g., at least the IDEA encryption algorithm). Accordingly, Applicants respectfully traverse the Examiner's rejections under 35 U.S.C. §§ 102, 103.

35 U.S.C. § 102 Rejection of Independent Claims 7, 11, 29, 31, and 33

Specifically, with respect to the rejection of independent claims 7 and 11 under 35 U.S.C. § 102, Applicants respectfully submit that TAN fails to disclose a data encryption method at least including constructing encryption definition data containing a plurality of encryption algorithm module indicators, wherein at least one of the plurality of encryption algorithm module indicators indicates an asymmetric encryption algorithm and at least one of the plurality of encryption algorithm module indicators indicates a symmetric encryption algorithm, as recited by claim 7. Furthermore, Applicants respectfully submit that TAN fails to disclose a data encryption method at least including

constructing an encryption module database for storing a plurality of entries of records of data, each of the plurality of entries of records of data containing an encryption algorithm module indicator and an authentication algorithm module indicator, wherein the encryption algorithm module indicator of one of the plurality of entries of records of data indicates an asymmetric encryption algorithm and the encryption algorithm module indicator of another of the plurality of entries of records of data indicates a symmetric encryption algorithm, as recited by claim 11.

To the contrary, TAN discloses a method of encrypting data including breaking a message into components and applying simple "securithms" or algorithms and sub-keys to the various components to maintain a certain degree of security. Specifically, TAN discloses that:

The underlying encryption process is a modular one, such that data which is to be transmitted in a secret message is broken up into components and essentially independent "modular" encryption is applied to each component. Whereas many encryption systems rely on complex encryption algorithms which require extensive computer processing resources, the inventive system can use many different simple securithms and/or many different simple sub-keys in order to create encrypted messages which have a similar or greater degree of security. The embodiment described below is a system in which both securithms and sub-keys are changed for each data block of the secret message. (*see* TAN, col. 8, lines 25-36).

In other words, TAN breaks apart a message into components so that each component can be encrypted independently according to a simple algorithm, thereby avoiding the use of complex algorithms.

In contradistinction, the present invention does not break the message into components to use simple algorithms to maintain a balance between security level and processing speed. Rather, the present invention maintains a balance between processing

speed and security level by utilizing a data attribute to select an encryption algorithm module indicator to control the processing of the input data. The encryption algorithm module indicator indicates either an asymmetric encryption algorithm or a symmetric encryption algorithm, thereby providing a balance between security level and processing speed. In view of the above, Applicants respectfully submit that TAN fails to anticipate the present invention, as recited by independent claims 7 and 11, under 35 U.S.C. § 102.

Furthermore, for at least the reasons discussed *supra*, Applicants respectfully submit that TAN fails to anticipate a data decryption method, as recited by independent claim 31, including at least constructing a decryption module database for storing a plurality of entries of records of data, each of the plurality of entries of records of data being a decryption algorithm module indicator, wherein one of the plurality of entries of records of data being a decryption algorithm module indicator indicates an asymmetric decryption algorithm and another of the plurality of entries of records of data being a decryption algorithm module indicators indicates a symmetric decryption algorithm. To the contrary, TAN merely discloses a data decrypting method for decrypting various components of a message according to simple "securithms" or algorithms and sub-keys (i.e., TAN does not disclose decrypting data according to asymmetric and symmetric decryption algorithms to maintain a balance between security level and processing speed).

Additionally, for at least the reasons discussed *supra*, Applicants respectfully submit that TAN similarly fails to anticipate a data decryption method, as recited by independent claims 29 and 33, including at least retrieving the decryption algorithm module indicator from a decryption module database which stores a plurality of

decryption algorithm module indicators, with at least one of the plurality of decryption algorithm module indicators indicating an asymmetric decryption algorithm and at least one of the plurality of decryption algorithm module indicators indicating a symmetric decryption algorithm.

35 U.S.C. § 103 Rejection of Independent Claims 1, 5, 13, 15-16, 23, and 27

With respect to the Examiner's rejection of independent claims 1 and 16 under 35 U.S.C. § 103, for at least the reasons discussed *supra*, Applicants respectfully submit that TAN fails to render obvious a data encryption method and a data encryption apparatus wherein at least one of the plurality of encryption algorithm module indicators indicates an asymmetric encryption algorithm and at least one of the plurality of encryption algorithm module indicators indicates a symmetric encryption algorithm.

Furthermore, with respect to the Examiner's rejection of independent claims 5, 13, 15, 23, and 27 under 35 U.S.C. § 103, for at least the reasons discussed *supra*, Applicants respectfully submit that TAN fails to render obvious a data encryption method and a data encryption apparatus wherein the encryption algorithm module indicator of one of the plurality of entries of records of data indicates an asymmetric encryption algorithm and the encryption algorithm module indicator of another of the plurality of entries of records of data indicates a symmetric encryption algorithm. Accordingly, Applicants respectfully submit that independent claims 1, 5, 13, 15-16, 23, and 27 are allowable at least for the reasons discussed *supra*.

35 U.S.C. §§ 102, 103 Rejection of Dependent Claims 2-4, 6, 8-10, 12, 14, 17-22, 24-26, 28, 30, 32, 34-39

With respect to the Examiner's rejection of dependent claims 2-4, 6, 8-10, 12, 14, 17-22, 24-26, 28, 30, 32, 34-39, Applicants submit that these claims are all directly or indirectly dependent from one of allowable independent claims 1, 5, 7, 11, 13, 15-16, 23, 27, 29, 31, and 33, which are allowable for at least the reasons discussed *supra*. Thus, these dependent claims are also allowable for at least the reasons discussed *supra*. Furthermore, all dependent claims recite additional features which further define the present invention over the references of record.

Thus, Applicants respectfully submit that each and every pending claim of the present application meets the requirements for Patentability at least under 35 U.S.C. §§ 102, 103, and respectfully request the Examiner to indicate the allowance of each and every pending claim in the present application.

CONCLUSION

In view of the fact that none of the art of record, whether considered alone, or in any proper combination thereof, discloses or renders obvious the present invention as now defined by the pending claims, and in further view of the above amendments and remarks, reconsideration of the Examiner's action and allowance of the present application are respectfully requested and are believed to be appropriate.

Applicants note that this amendment is being made to advance prosecution of the application to allowance, and should not be considered as surrendering equivalents of the territory between the claims prior to the present amendment and the amended claims. Further, no acquiescence as to the propriety of the Examiner's rejection is made by the present amendment. All amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

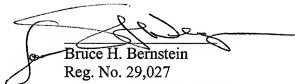
Additionally, Applicants note that the status of the present application is after final rejection and that once a final rejection has issued, an applicant does not have a right to amend an application. Nevertheless, pursuant to M.P.E.P. §714.13, Applicants contend that entry of the present amendment is appropriate because the proposed amended claims avoid the rejections set forth in the last Official Action, resulting in the application being placed in condition for allowance, or alternatively, the revised claims place the application in better condition for purposes of appeal. Further, the revised claims do not present any new issues that would require any further consideration or search by the Examiner, and the amendment does not present any additional claims

without cancelling a like number of pending claims. Accordingly, entry of the present amendment is respectfully requested.

Should the Commissioner determine that an extension of time is required in order to render this response timely and/or complete, a formal request for an extension of time, under 37 C.F.R. §1.136(a), is herewith made in an amount equal to the time period required to render this response timely and/or complete. The Commissioner is authorized to charge any required extension of time fee under 37 C.F.R. §1.17 to Deposit Account No. 19-0089.

If there should be any questions concerning this application, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,
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